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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/127,341	07/31/1998	MICHAEL DEADDIO	11021.0001	9998

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EXAMINER

FELTEN, DANIEL S

ART UNIT

PAPER NUMBER

3624

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/127,341

Applicant(s)

DEADDIO ET AL.

Examiner

Daniel S Felten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 21-23 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-23 and 25-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Receipt of the Response filed January 20, 2005 is acknowledged. Claims 21-23 and 25 – 33 remain pending in the application.

### ***Response to Arguments***

2. Applicant's arguments, see Response, filed January 20, 2005 with respect to the rejection(s) of claim(s) 21-23 and 25-33 under the secondary reference Kodosky et al (US 5,301,336) have been fully considered and are persuasive. Therefore, the rejection using Kodosky has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Garman (US 5,692,233).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21-23 and 25-33 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 21-23 and 25-33 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed January 20, 2005. In that paper, applicant has stated "event representation" of a financial instrument is a time line of inter-related events that is specific to the static representation of the instrument, constitutes in its entirety the financial event structure of the instrument, and can always be exactly reproduced from the static representation of the financial instrument, and this statement indicates that the invention is different from what is

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defined in the claim(s) because the indication of a time-line may be considered sequential, whereas the specification has loosely defined an event representation as event streams created via a event extraction process. See specification paragraph [0071]. The claim language states that, "...processing by acting upon the events of the said event representation.." There is nothing in the specification or in the claim language to indicate that the events that are processed are sequential (as in a time-line), or that the events are inter-related, per se. Thus the claim language has been given its broadest reasonable interpretation [see MPEP 2111].

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21-23 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall (US 5,675,746) in view of Garman (US 5,692,233).

Marshall discloses, as in claim 21, a method for processing financial instruments comprising a representation (metaphors or cards) of the instrument and at least one processor (see modules), wherein said at least one processor performs said processing by acting upon said representation, and wherein the representation is specified separately from at least one processor (see Marshall, col. 2, 11. 27+, col. 4, 11. 28+, and col. 15, 11. 17+', and col. 16, 11. 27-63),

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*As in claims 22-24*, wherein the representation further comprises said instrument inputs, the relationships of said inputs with each other and how said relationships combine to produce a series of financial event streams see Marshall, col. 2, 11. 27+, col.4, 11. 28+).

*As in claims 27 and 28*, wherein processing is implemented via polymorphism (see Marshall, col. 2, 11. 27+, col. 4, 11. 28+-, and col. 15, 11. 17+-, and col. 16, 11. 27-63),

*As in claim 29*, Marshall discloses wherein a plurality of processors may be utilized to provide alternative methods of performing a type of processing upon the instrument without changing the representation of the instrument (see Marshall, col. 2, 11. 27+-, col. 4, 11. 28+).

*As in claims 30 and 31*, Marshall discloses wherein said representation is composed from a set of primitives (see Marshall, col. 2, 11. 27+', col. 4, 11. 28+, and col. 15, 11. 17+, and col. 16, 11. 27-63).

*As in claims 32 and 33*, Marshall discloses a system and machine readable medium for storing a computer program comprising at least one digital computer, storage means and input-output peripheral means, adapted so as to perform the processing of financial instruments (see Marshall, col. 2, 11. 27+', col. 4, 11. 28+., and col. 15, 11. 17+, and col. 16, 11. 27-63).

Marshall discloses static representations (*metaphors*) which represent specific financial instrument information as three dimensional objects that the user is able to view and manipulate via the shapes, colors, positions, animations and textures that the user selects to represent different characteristics of dynamic financial data (see col. 3, ll. 57-63; and col. 6, ll. 10-50).

Marshall fails to disclose, as in claim 1, an event representation of the instrument wherein said representation is specified independently from at least one processor. Garman discloses a tool ("*DerivaTool*") which can describe a sequence of events (*event representation*) associated with a financial instrument based upon static information (*the market and price history*) that is specified independently from at least one processor (*simulator*) (see Garman, pages 24-27). Since Marshall uses "tools" (via WorldToolKit library) which can perform functions that allow the user to analyze market movements/trends and complex details of financial instruments via simulations (see Marshall col. 1, line 63 to col. 2, line 22; and col. 4, line 27+), one of ordinary skill in the art at the time of the invention would have considered DerivaTool is an art recognized equivalent to the metaphors of Marshall in as much as the metaphors and DerivaTool use simulators to easily convey and manipulate complex details of financial instruments. Also, an artisan at the time of the invention would be motivated to integrate the sequence of events described in the scenario portion of DerivaTool into one or more of the virtual graphic characteristics described by Marshall, because it would be easier to view complex financial details (numbers) in a graphic (or pictorial/ virtual) form (see Marshall, col. 3, ll. 36-41). Thus such a modification would be an obvious expedient well within the ordinary skill in the art.

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It would have been obvious for an artisan of ordinary skill in the art to integrate the features of Kodosky into Marshal so as to create various representations (virtual instrument processes) that may be processed independently from one another. Thus such a modification would allow Marshall to process different events independent of each other. Thus such a modification would be considered an obvious expedient to one of ordinary skill in the art.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S Felten whose telephone number is (703) 305-0724. The examiner can normally be reached on Flex.

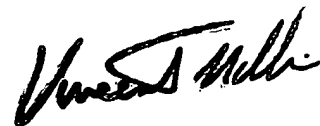
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel S Felten  
Examiner  
Art Unit 3624



DSF  
May 01, 2005



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